A CASE OF HORNER'S SYNDROME AFTER INTERNAL JUGULAR VENOUS CATHETERIZATION IN A CHILD

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INTRODUCTION

Horner's Syndrome (HS) is characterized by a tryad of miosis, ipsilateral ptosis and facial anhydrosis as a result of a lesion occurring at any given point of the oculosympathetic pathway between the hypothalamus and the eye[1]. Although rare, there are, however, a few reports of this syndrome occurring in the sequence of the internal jugular vein catheterization[2].

We report a case of Hs postoperatively following IJV catheterization in a child.

DESCRIPTION OF THE CASE

Boy, 4 years old, 19 kg, admitted for a cardiac septoplasty under general anesthesia due to a partial AV septal defect.

ASA 3

Monitorization: ASA *standards* + Invasive arterial blood pressure + Central venous pressure + BIS®.

INDUCTION

Right Internal Jugular Catheterization

Left Internal Jugular Catheterization

MAINTENANCE AND EMERGENCE

HOSPITAL STAY

RECOVERY ROOM

DISCHARGE

0 minutes — **5 hours** — **3 weeks**

General balanced anesthesia

- 2 attempts were undertaken
- Inadvertently puncturing the carotid artery
- Immediately followed by direct compression.

Without complications

Smaller right pupillary diameter
+
Ipsilateral partial ptosis

Complete remission of the HS

- **Positioning:**
  - Trendelenburg tilt
  - Without head rotation
  - Rolled towel placed under his shoulders
- 24 gauge needle
- Seldinger technique
- Medial approach

- Same positioning and approach
- Cannulated on a first attempt

- Pediatric Neurology consult,
- Head and neck CT and carotid Doppler ultrasound- NORMAL

Horner´s Syndrome

COMMENTS AND DISCUSSION

The proximity between the cervical sympathetic pathway and the internal jugular vein may predispose it to lesions, either by direct needle trauma or owing to pressure exerted by an expanding local hematoma resultant from an inadvertent carotid artery puncture[1]. In what it relates to the present clinical case, the findings, particularly the sudden onset, point to the HS being a result of the ipsilateral jugular vein catheterization, underlining that an ultrasound-guided puncture was not ensued due to a momentary lack of availability[2]. This case report, therefore, emphasizes the importance of ultrasound monitoring and guidance of central venous cannulation.

References: 1 - Journal of Clinical Anesthesia 2008; 20: 304-06
2 - Pediatric Anesthesia 2007; 17(4): 396-98